

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.: unassigned yet

Filing Date: August 4, 2003

Applicant: Kenichi MARUYAMA et al

Group Art Unit:

Examiner: unassigned yet

Title: Heat Accumulator For Vehicle Use

Attorney Docket: 4041K-000144

Director of the United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

II. COPIES

A. X Submitted herewith is a legible copy of (i) each U.S. patent application publication and U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; (iii) for each cited pending U.S. application, the application specification including the claims, and any drawing of the application which caused it to be listed including the claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B. Any patents, publications or other information which are listed on Form 1449 or on the copies of PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial NumberU.S. Filing Date

C. Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i).

Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.

D. This is a PCT application in the entry of the National Phase in the United States. A copy of the International Search Report is attached for the Examiner's information. The documents listed on the International Search Report are listed on the attached Form-1449 for consideration by the Examiner and for listing on any patent resulting from this application. Since the International Search Report was from the US, EPO, or PTO search authorities, copies of these references should have been supplied to the USPTO under the trilateral agreement and are believed to be in the file of the above-identified application. (MPEP 1893.03(g))

III. **CONCISE EXPLANATION OF THE RELEVANCE** (check at least one box)

A. Except as may be indicated below in (B), all of the patents, publications or other information are in the English language (concise explanation not required).

B. A concise explanation of the relevance of each patent, publication or other information listed that is not in the English language is as follows (see 37 C.F.R. § 1.98(a)(3)):

- See the attached foreign patent office communication from a counterpart foreign application:
- English translations of the abstracts are provided for some Japanese references.
- Other: Applicants have provided an "Information List" which gives a brief explanation of the Japanese prior art cited herein.

C. The following additional information is provided for the Examiner's consideration.

IV. **CROSS REFERENCE TO RELATED APPLICATION(S)**

A. The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this(these) application(s) to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. § 122.

Serial No.

Filing Date

Art Unit

V. **THIS IDS IS BEING FILED UNDER**

A. 37 C.F.R. § 1.97(b): (check only one box)

1. within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.

2. within three months of the date of entry of the national stage as set forth in §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.

3. before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).

4. before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.

B. 37 C.F.R. § 1.97(c): (check only one box)

• before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.

1. No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

2. See the certification below. No fee is required.

C. 37 C.F.R. § 1.97(d):

• after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.

1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI. CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)

The undersigned hereby certifies that:

A. each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. 1.704(d) below in section VII, if applicable; or

B. no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).

C. Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication

from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.

VII. STATEMENT UNDER 37 CFR 1.704(d)

The undersigned hereby states that:

each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart application and this communication was not received by any individual designated in 37 C.F.R. 1.56(c) more than thirty days prior to the filing of this IDS.

VIII. PAYMENT OF FEES (check only one box)

A. A check in the amount of \$180.00 is enclosed for the above-identified fee.

B. Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

By:


H. Keith Miller, Esq.
Reg. No. 22,484

Dated: August 4, 2003

HARNESS, DICKEY & PIERCE, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600

FORM HDP-1449 (Based on Form PTO-1449)

PATENT AND TRADEMARK OFFICE
INFORMATION DISCLOSURE CITATION
 (Use several sheets if necessary)

Sheet 1 of 1

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|------------------------|----------------|
| ATTORNEY DOCKET NO. | SERIAL NO. |
| 4041K-000144 | Unassigned yet |
| APPLICANT | |
| Kenichi MARUYAMA et al | |
| FILING DATE | GROUP |
| August 4, 2003 | |

U.S. PATENT DOCUMENTS

| Ref. Desig. | Examiner's Initials | Document Number | Date | Name | Class/ Subclass | (If appropriate) Filing Date |
|----------------|------------------------|--------------------|------|------|--------------------|---------------------------------|
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FOREIGN PATENT DOCUMENTS

| Ref. Desig. | Examiner's Initials | Document Number | Date | Country | Class/ Subclass | Translation Yes | No |
|----------------|------------------------|--------------------|---------|---------|--------------------|--------------------|----|
| 1. | | 7-27430 | 5/1995 | Japan | | | X |
| 2. | | 2002-309936 | 10/2002 | Japan | | Abstract | |
| 3. | | 10-86644 | 4/1998 | Japan | | Abstract | |
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OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)

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| Ref. Desig. | Examiner's Initials | |
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Examiner:

Date Considered:

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Information List (Form 1)

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|---------------|--------------------------|
| US Serial No. | |
| Our Ref. | ND, TYT, TIG- M160-US |

The following is a List of References provided by Applicant. Please file an Information Disclosure Statement using this Information.

| Document Number | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s) |
|-----------------|------------------|---|
| JUMP7-27430 | May 23, 1995 | <p>Refer to the description of the related art in the specification.</p> <p>As shown in Fig. 1, a first embodiment shows a first design of the present invention. A heat accumulator is a double tank structure composed of an inner container 1 and an outer container 2 made of stainless. The inner container 1 and the outer container 2 are integrated by welding an outer periphery of a mouth 3 of the inner container 1 to a mouth 3' of the outer container 2.</p> |
| JPP2002-309936 | October 23, 2002 | <p>As shown in Fig. 2, an accumulator tank 10 is mounted on a vehicle so that a tank body 11 is located at an upper side.</p> <p>The tank body 11 is made of a stainless material such as one which has an excellent corrosion resistance and comprises a substantially cylindrical inner tank 11a and an outer tank 11b containing the inner tank 11a.</p> <p>A mouth cylinder 13,</p> |

A. AOKI, ISHIDA & ASSOCIATES

Information List (Form 1)

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The following is a List of References provided by Applicant. Please file an Information Disclosure Statement using this Information.

| Document Number | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s) |
|-----------------|------------------|---|
| JPP10-86644 | April 7, 1998 | <p>which is the entrance of a cooling water to the inner tank 11a, is integral with the lower center portion of the inner tank 11a. Also, a lower end of the outer tank 11b is welded to a side wall surface of the mouth cylinder 13 and is positioned with respect to the inner tank 11a.</p> <p>A housing 20 is bolted to the outer tank 11b via a stay 15 welded to the outer tank 11b. While maintaining the state, the mouth cylinder 13 (opening end 13a) of the tank body 11 is fitted to the housing 20 via an O-ring 16 and the fitting portion is sealed using the O-ring 16.</p> <p>In case of mounting a heat storage tank to a side member, if the heat storage tank is not collapsed in the case of a vehicle collision, the heat storage tank tends to reinforce the side member. Therefore, there is caused a problem that the side member does not function in the case of a car collision.</p> |

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Information List (Form 1)

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| Document Number | Publication Date | Brief Explanation or Page(s) & Line(s) of Related Part(s) |
|-----------------|------------------|--|
| | | <p>The present invention has been accomplished to solve the above problems. It is an object of the present invention to provide a heat storage tank, which has a tank body which has a high strength while is likely to be collapsed in the case of a car collision.</p> <p>In a heat storage tank 5, a container body 20 of which is a double tank structure comprised of an inner container and an outer container, a plurality of grooves 10a, 10b, the directions of which are one, are formed on an upper surface and lower surface of the inner and outer container.</p> <p>The heat storage tank 5 is attached to the side member 8 using brackets 9a, 9b, 9c so that a shaft A vertical to a vehicle travel direction is inclined at an angle θ with respect to the grooves 10a, 10b direction.</p> <p>This makes the heat storage tank 5 collapsible in both of a forward direction and a forward left direction.</p> |

A. AOKI, ISHIDA & ASSOCIATES